
MAIN ST.


AIN STREET


!A IN


SW 1100
Main St


AUTOMOTIVE

Main Street: from Footpath to Highway

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David Evans and Associates, Inc.

Balancing Downtown Vitality…

…with Highway Traffic

Why?

- Most of Oregon's 246 cities straddle a highway.
- Highways are often the only way to get around & they're Main Street.
- Conflicts arise between local users and through traffic.
- A vital Main Street helps reduce sprawl.

At the Heart

"Main Street is where you have parades."
–Focus Group Participant

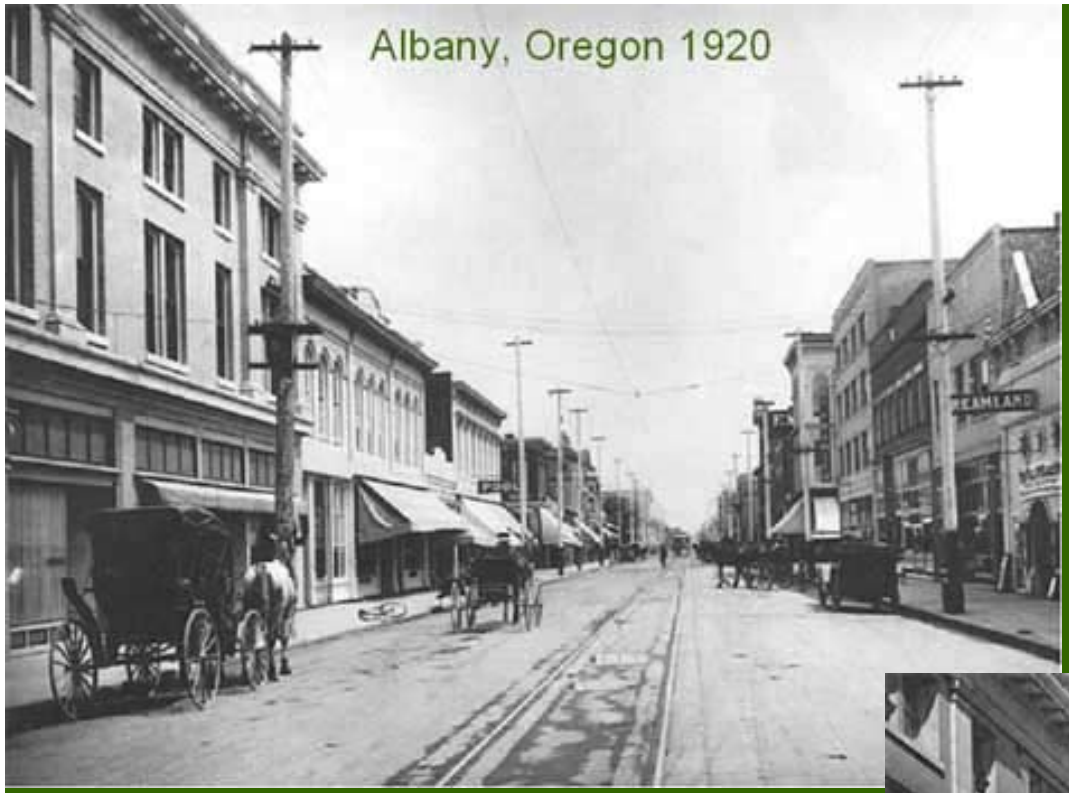
CONTEXT:

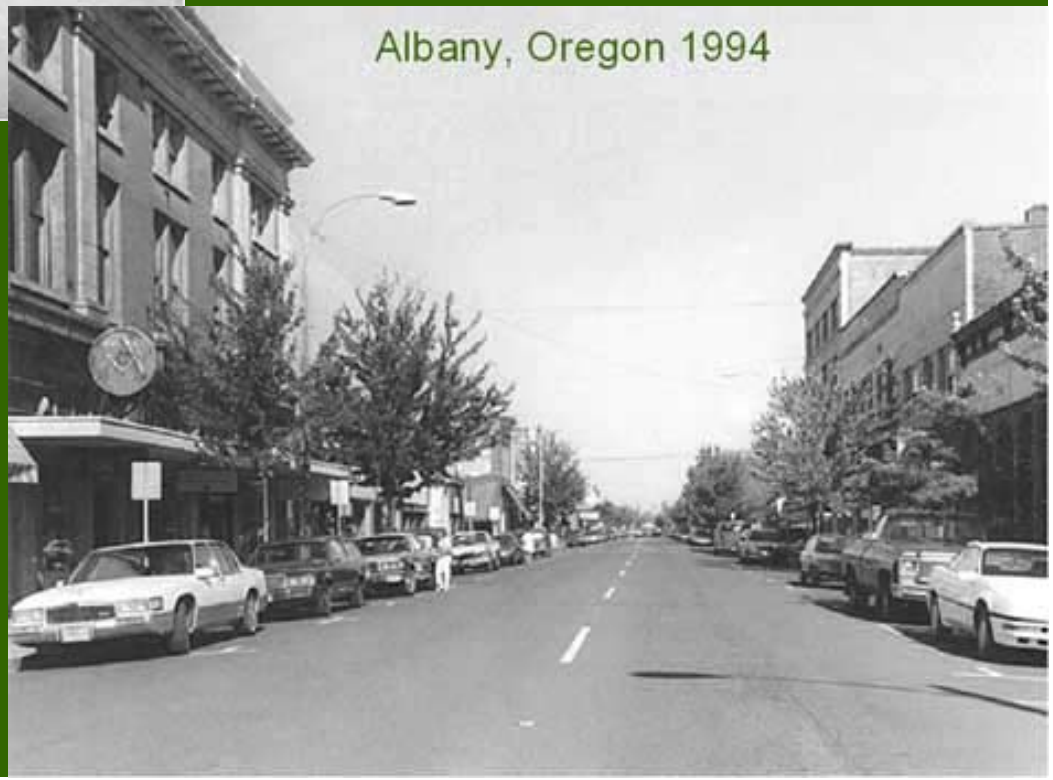
- Did main street create the highway,

OR

- Did the highway create main street?


Historic Downtown
MANE

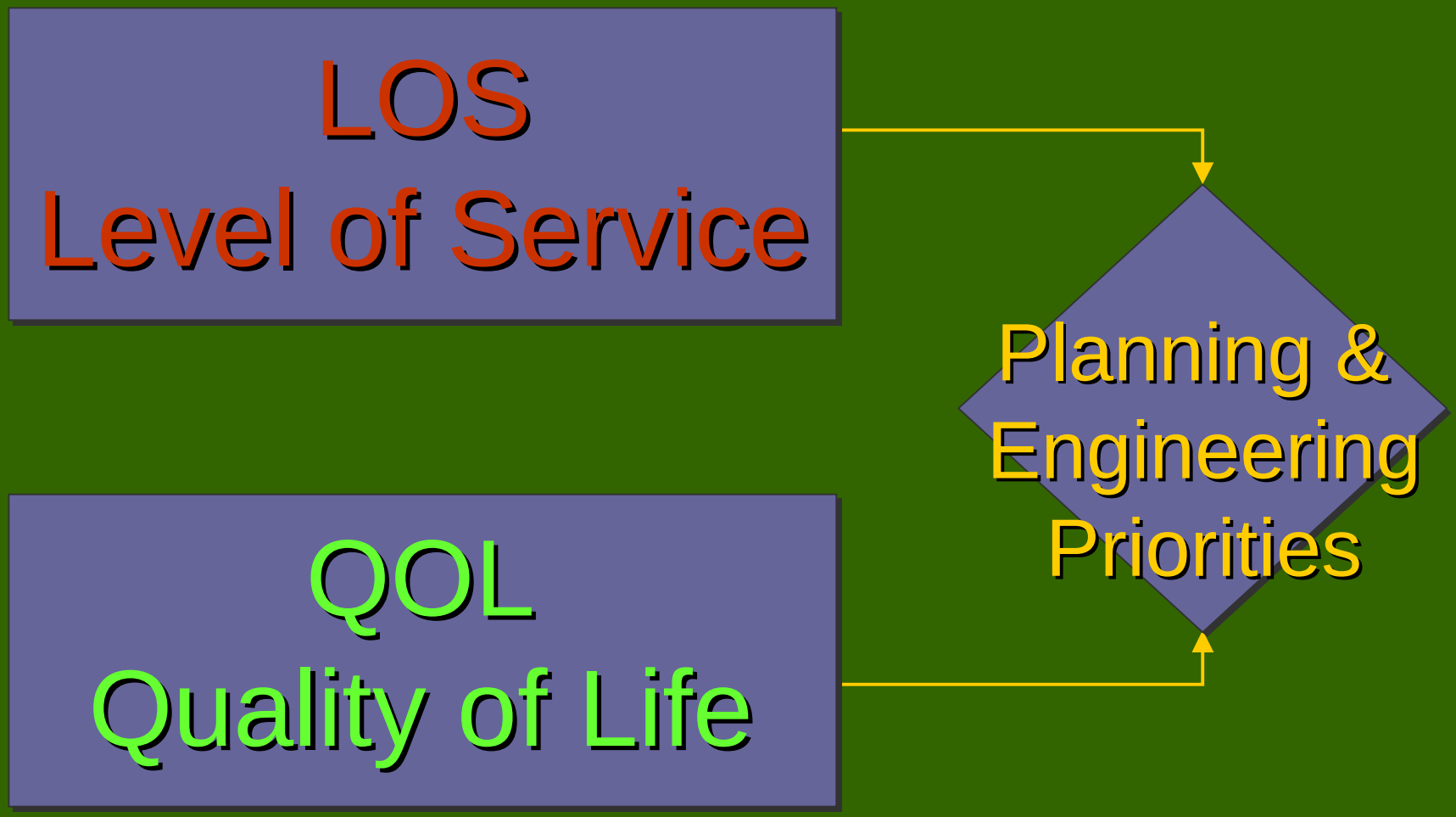

Albany, Oregon 1920


Albany, Oregon 1994


Sisters, Oregon

Remember - There are many Points of View!

Measuring Success




97 NORTH
LEFT LANE
Hardee's
Chevron

Identify the Real Problem

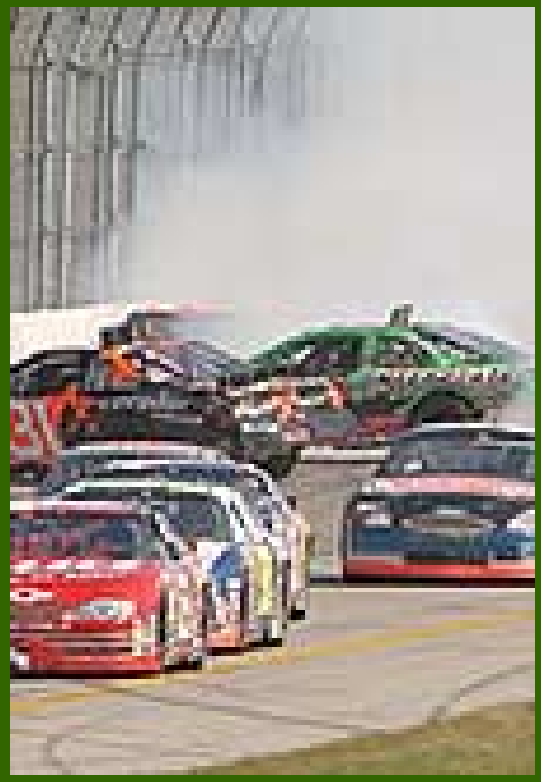
"A problem well stated is a problem half solved."

– Charles Franklin Kettering (1876-1958)

- **Safety**
- **Security**
- **Comfort**
- **Crossing**
- **Access**
- **Vitality**
- **Congestion**
- **Speed**

SPEEDING

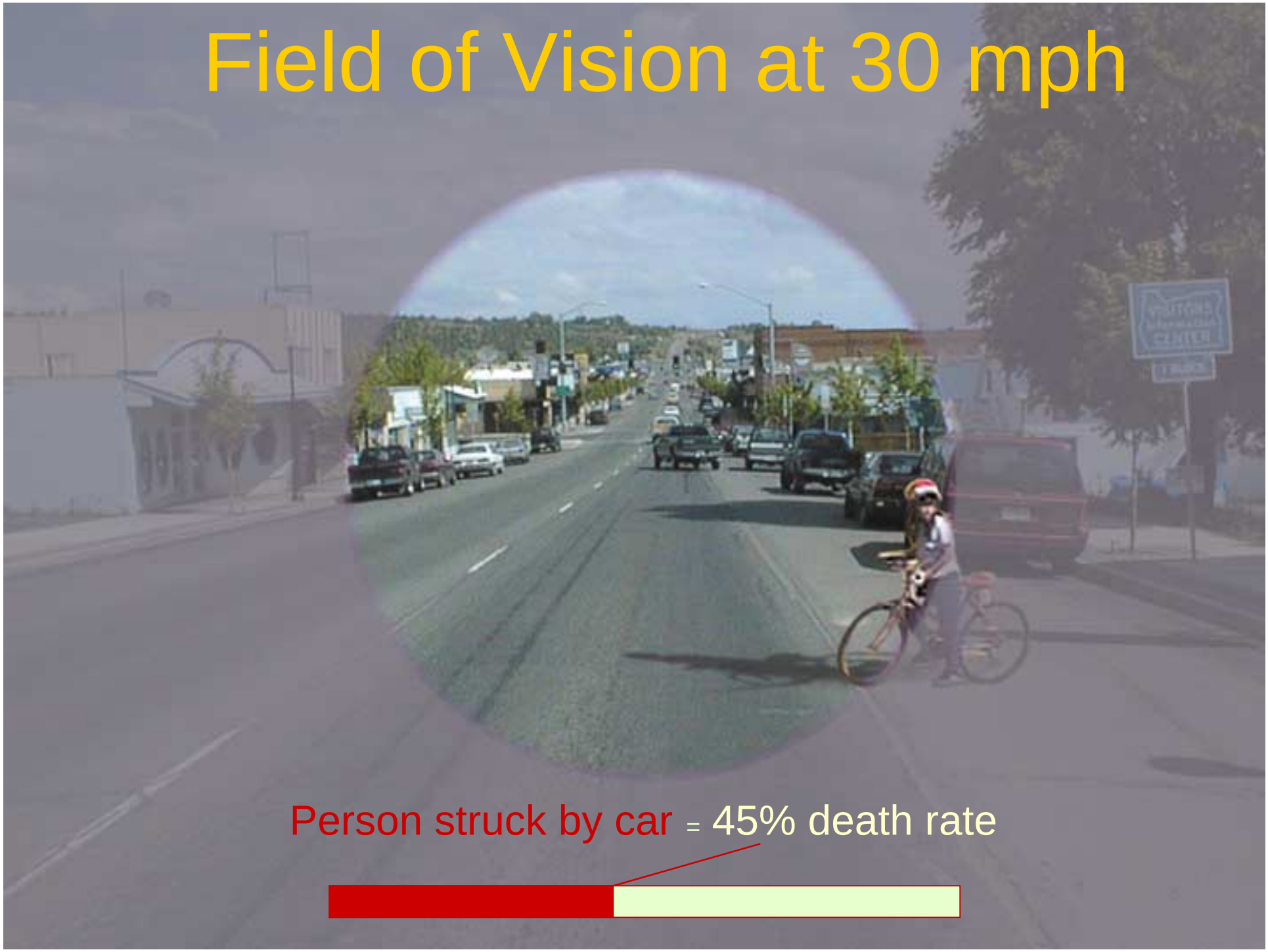
"Cars *zoom* through downtown."



Field of Vision at 40 mph

Person struck by car = 85% death rate

Field of Vision at 30 mph



Person struck by car = 45% death rate

Field of Vision at 20 mph

Person struck by car = 15% death rate

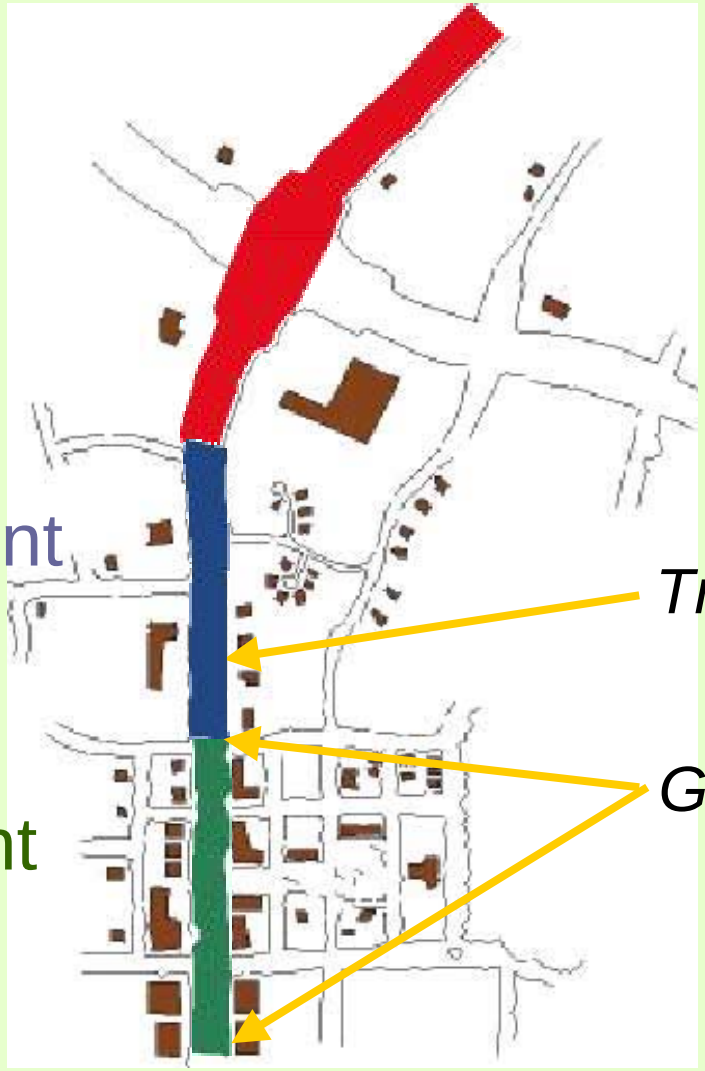
Field of Vision at 15 mph

Speed Zones

Rural Segment
55 mph

Suburban Segment
~40 mph

Main St. Segment
20–25 mph



Street Types

Highway Commercial

Transition Area

Entering Downtown

Traditional Main Street

Gateway

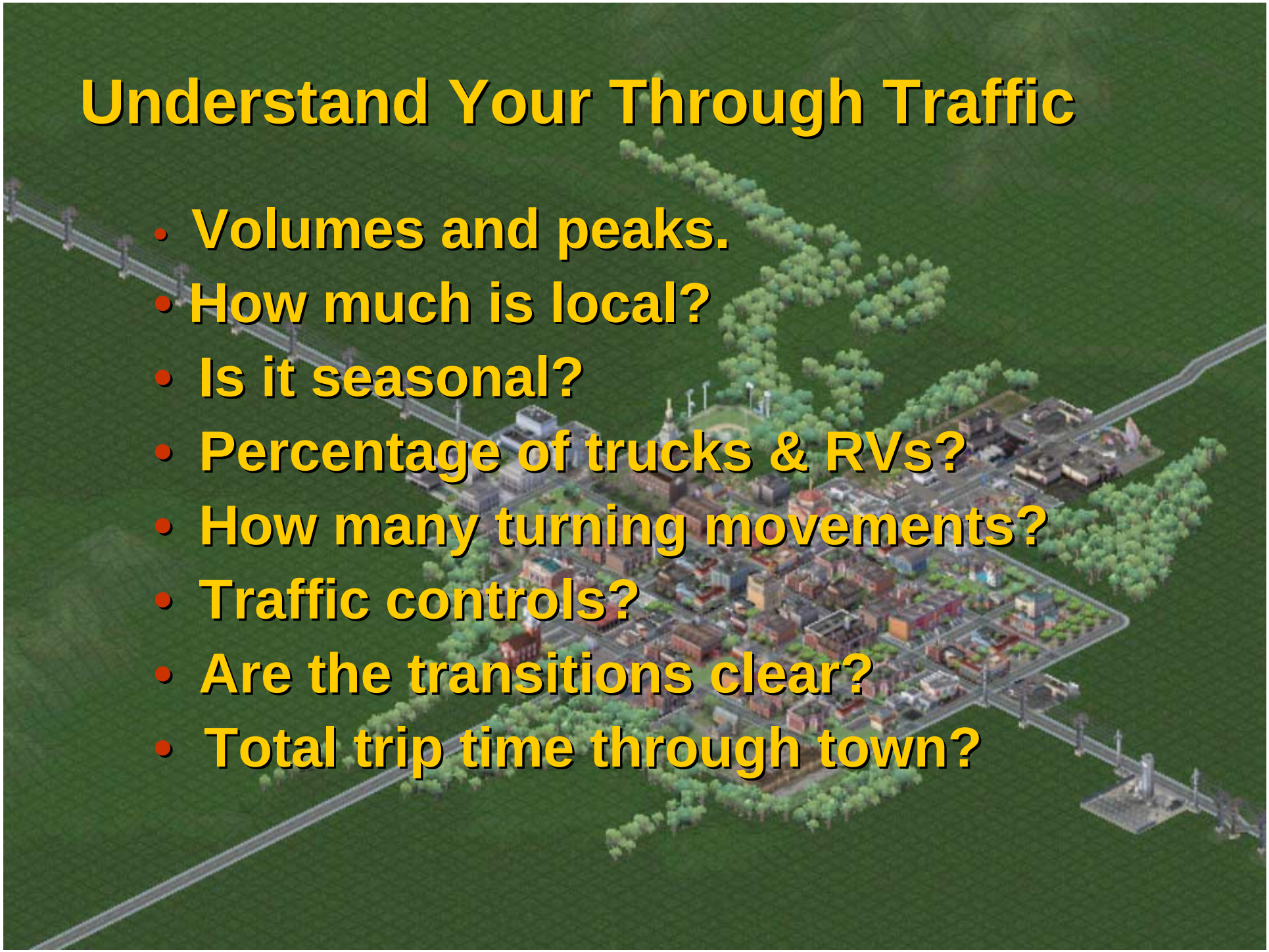

MAIN STREET
SHASTA VALLEY REALTY


THIS LITTLE TOWN
IS HEAVEN TO US.
DONT DRIVE LIKE
HELL THRU IT.

CONGESTION

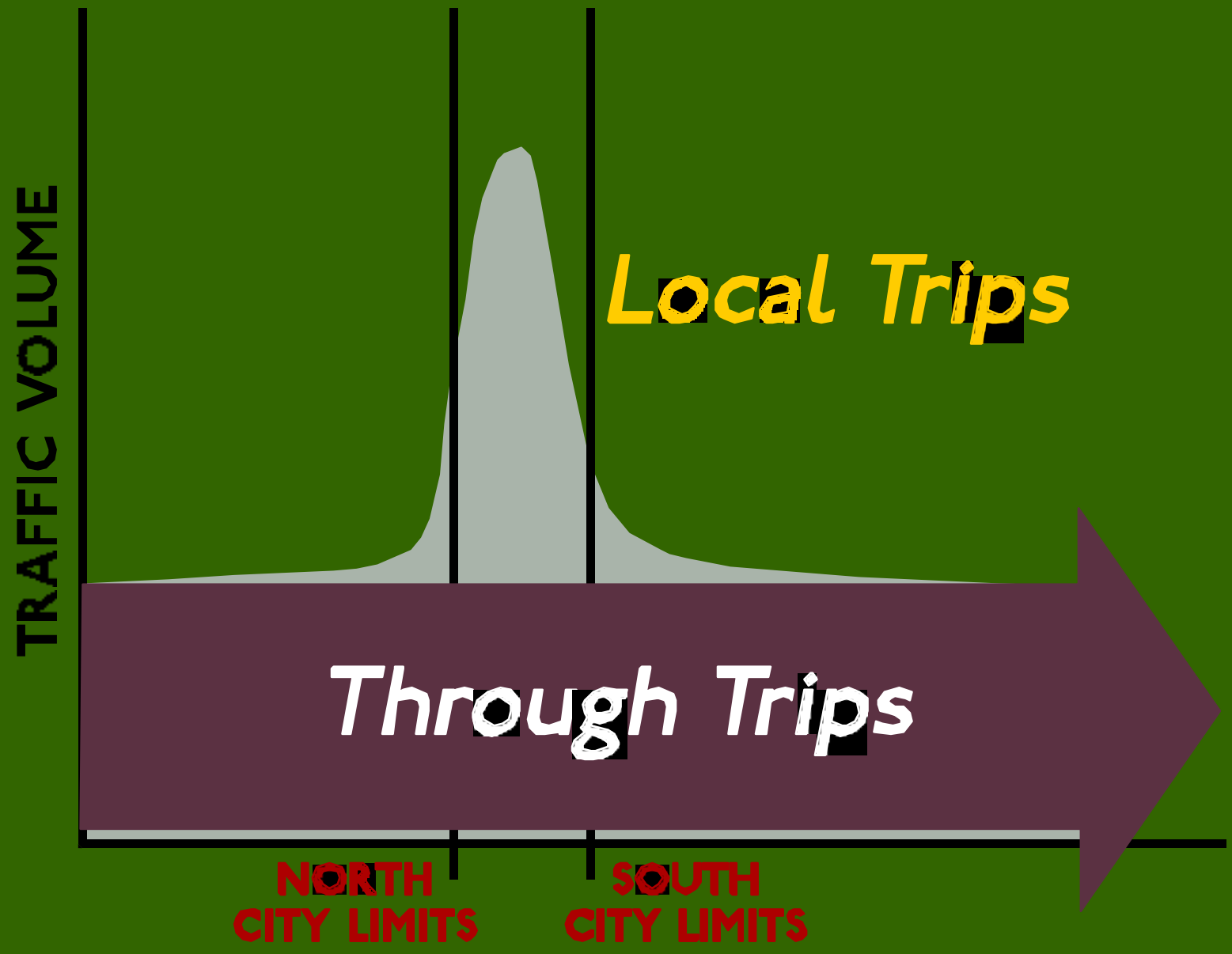
"Traffic is terrible."

Understand Your Through Traffic

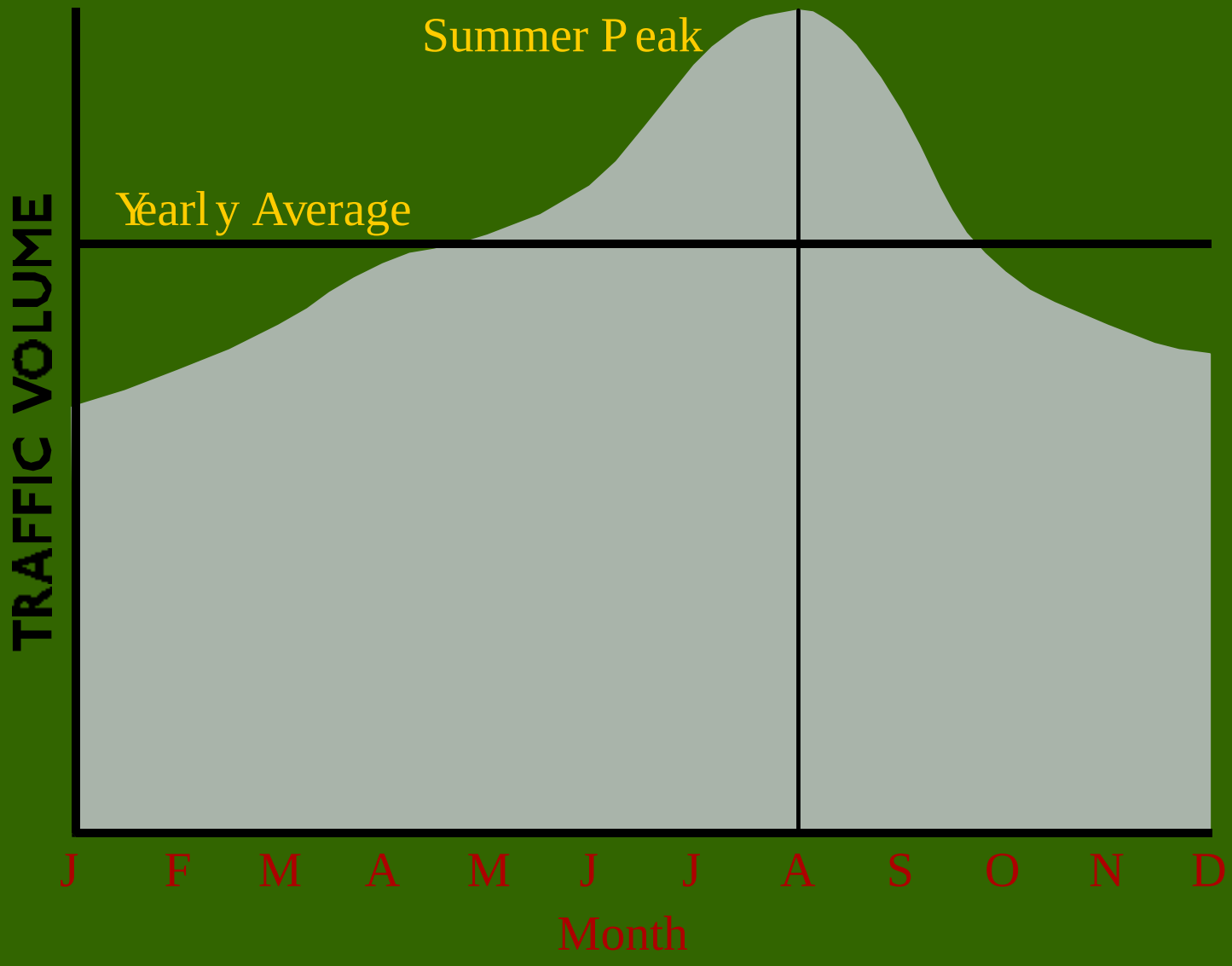


- Volumes and peaks.
- How much is local?
- Is it seasonal?
- Percentage of trucks & RVs?
- How many turning movements?
- Traffic controls?
- Are the transitions clear?
- Total trip time through town?

Most Traffic Is Local



Traffic can be seasonal



Finding the Right Strategy

- Calm the traffic
- Add a buffer
- Improve local street network
- Develop secondary through route
- Create couplet
- Develop transition area & gateway
- Expand Main Street
- Construct bypass

Creative Solutions Look at the entire street system…

…what are the options?

Improve Local Street Network

- Short blocks on main street
- Direct routes to neighborhoods
- Serves local trips

Secondary Through Route

- Fast parallel route
- Designed for trucks
- Good entry & exit to highway
- Compatible land uses

Couplet (1-Way Streets)

- High traffic volume
- Two parallel “main streets”
- Good connections & parking
- Good split points

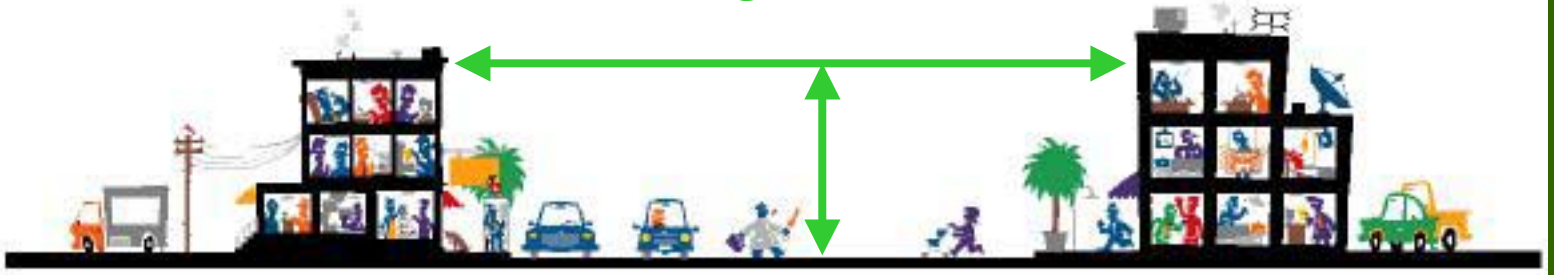
Bypass

- Extreme traffic volume
- Limited access
- Logical route available
- Acceptable costs

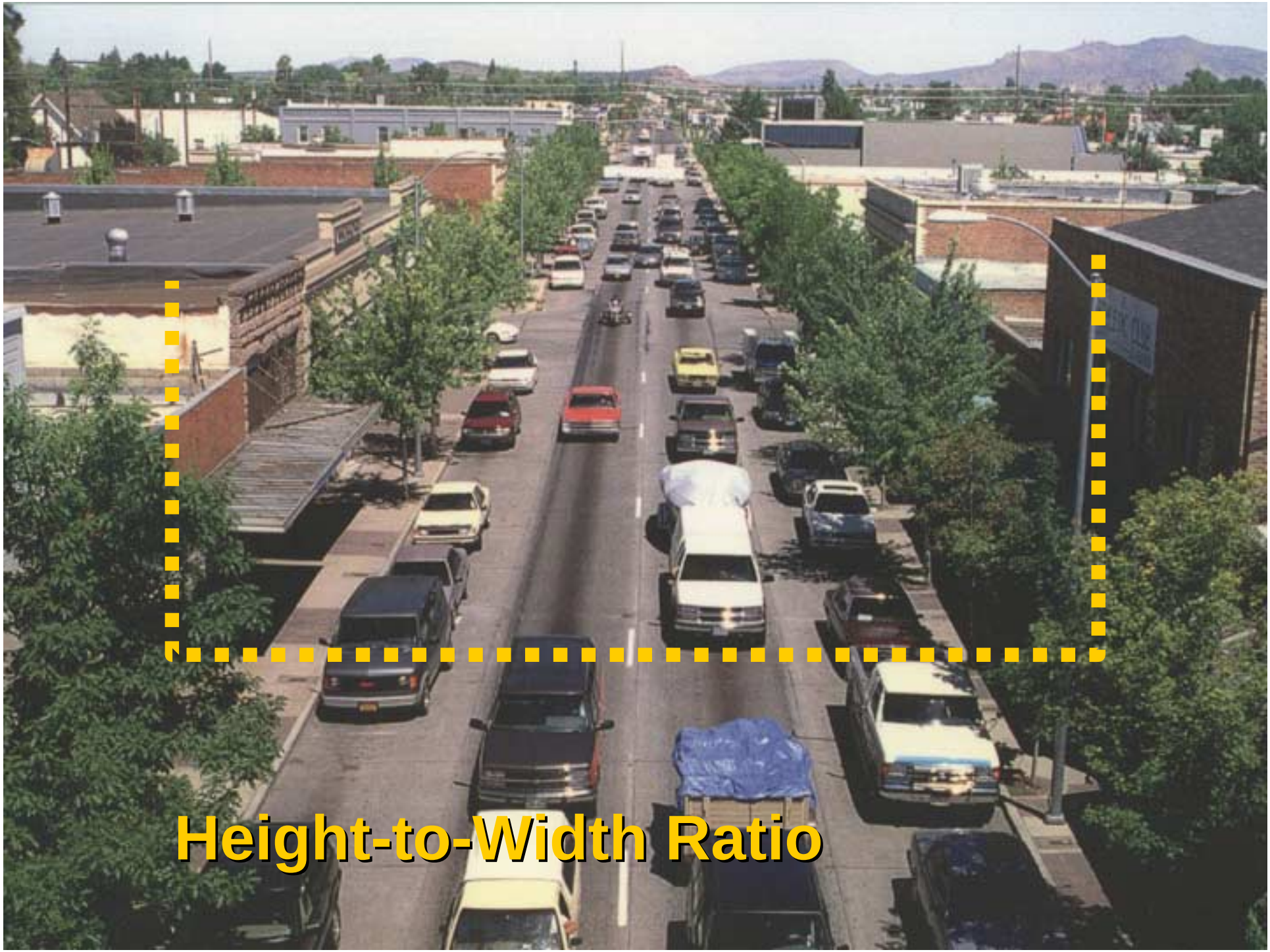

Context is created by land use!
Red Apple
MARKET

Building setback, height & orientation

Good = 1:3 height-to-width ratio



Bad = 1:7 height-to-width ratio


Height-to-Width Ratio

Sidewalk Width

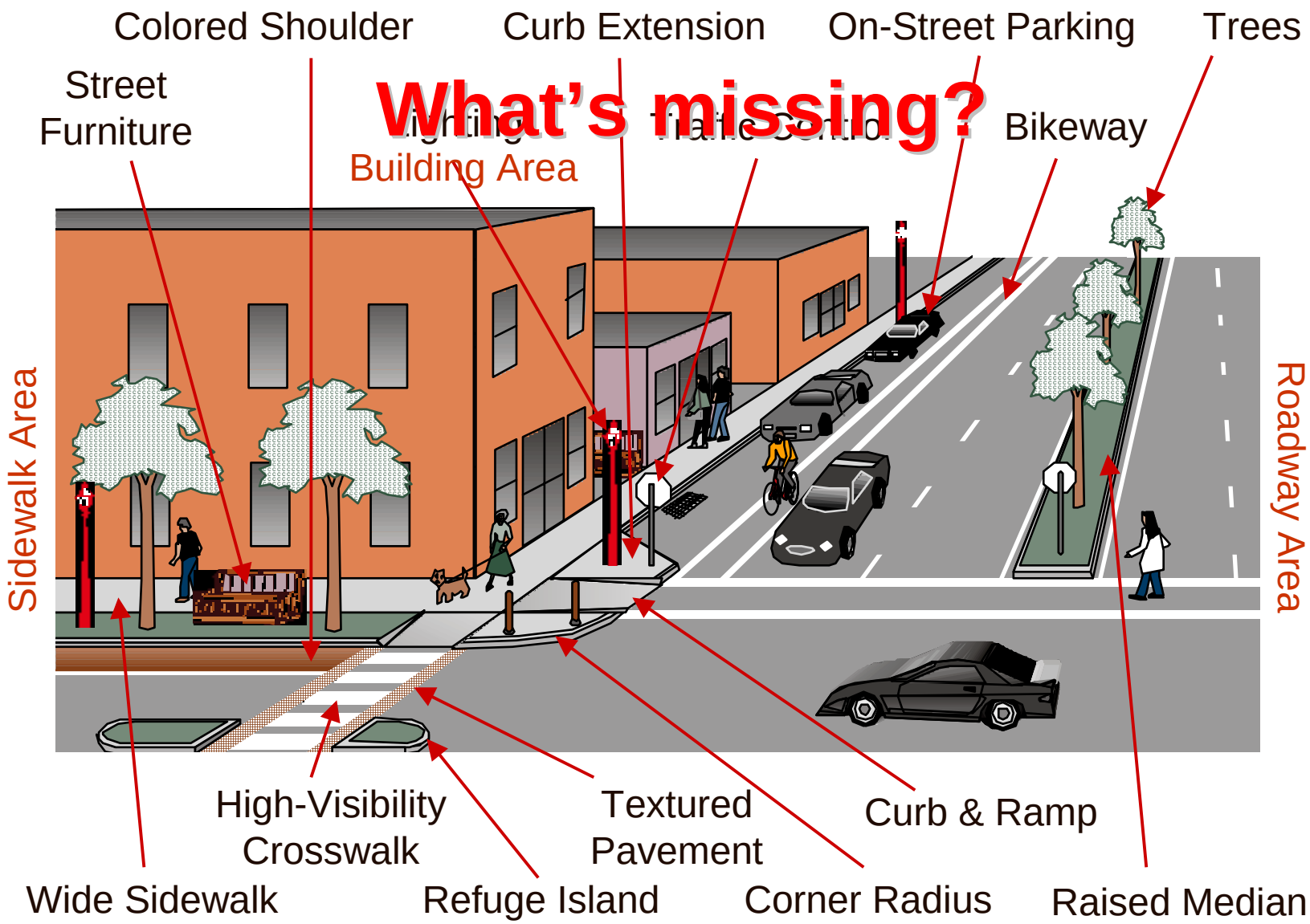
8’ barely allows 2-way traffic + 3’ for bench

10’ is more comfortable

12’ adds room for tables, planters, etc.

15’ needed for transit shelter or heavy traffic

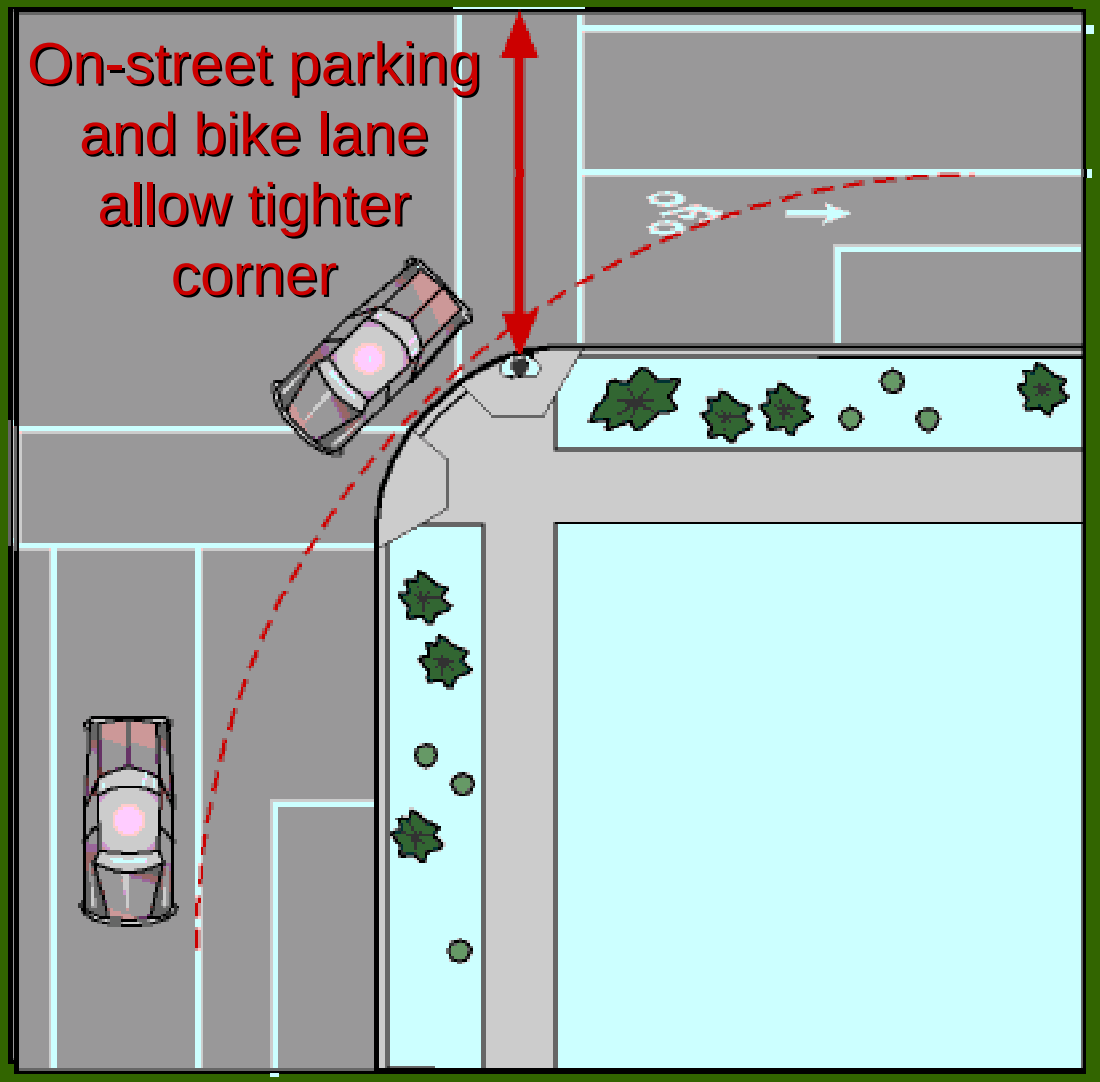
Look at the design ingredients…



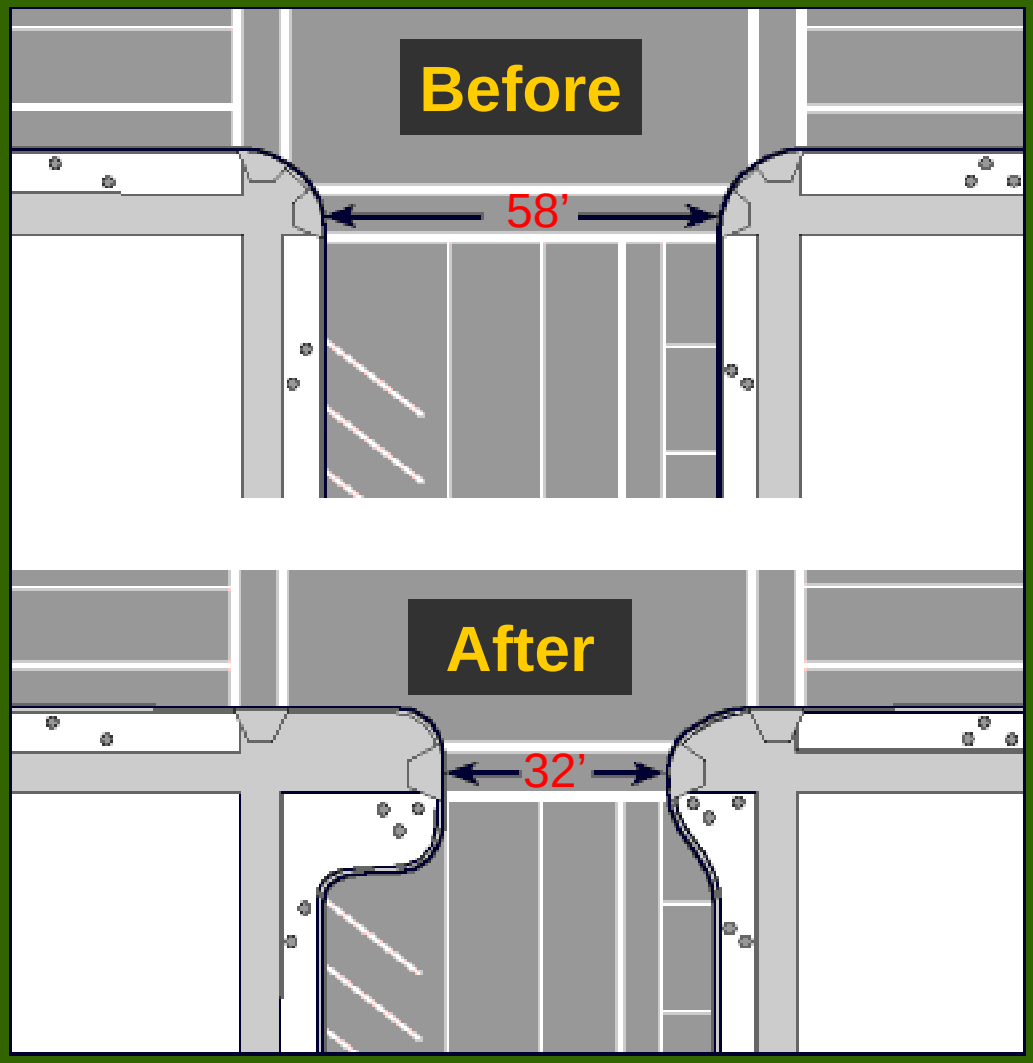
Choose the right ingredients

- Keep goals in mind
- Combine as many tools as needed
- Be creative
- Involve the public
- Apply sound & flexible engineering

Corner Radius



Curb Extension



Advantages:

- Shortened crossing distance.
- Greater pedestrian visibility.
- Better crosswalk alignment.
- Shorter pedestrian phase at signals.
- Place to put signal heads.

Travel Lane Width

Trees

- Most effective expenditure.
- Transforms street.
- Gives scale, softens edges.
- Attracts people.

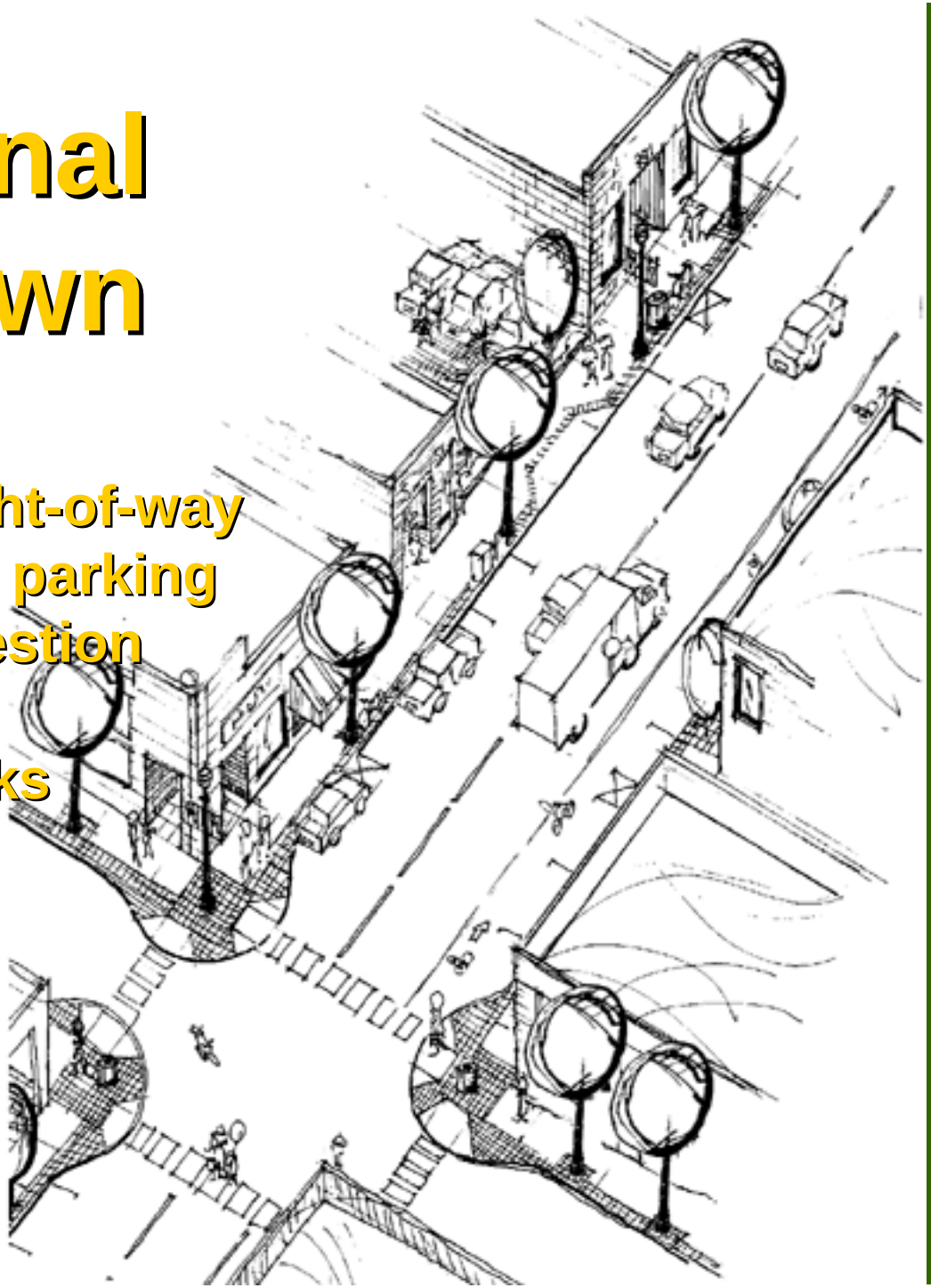
Good Trees Make Great Streets

Pedestrian Details

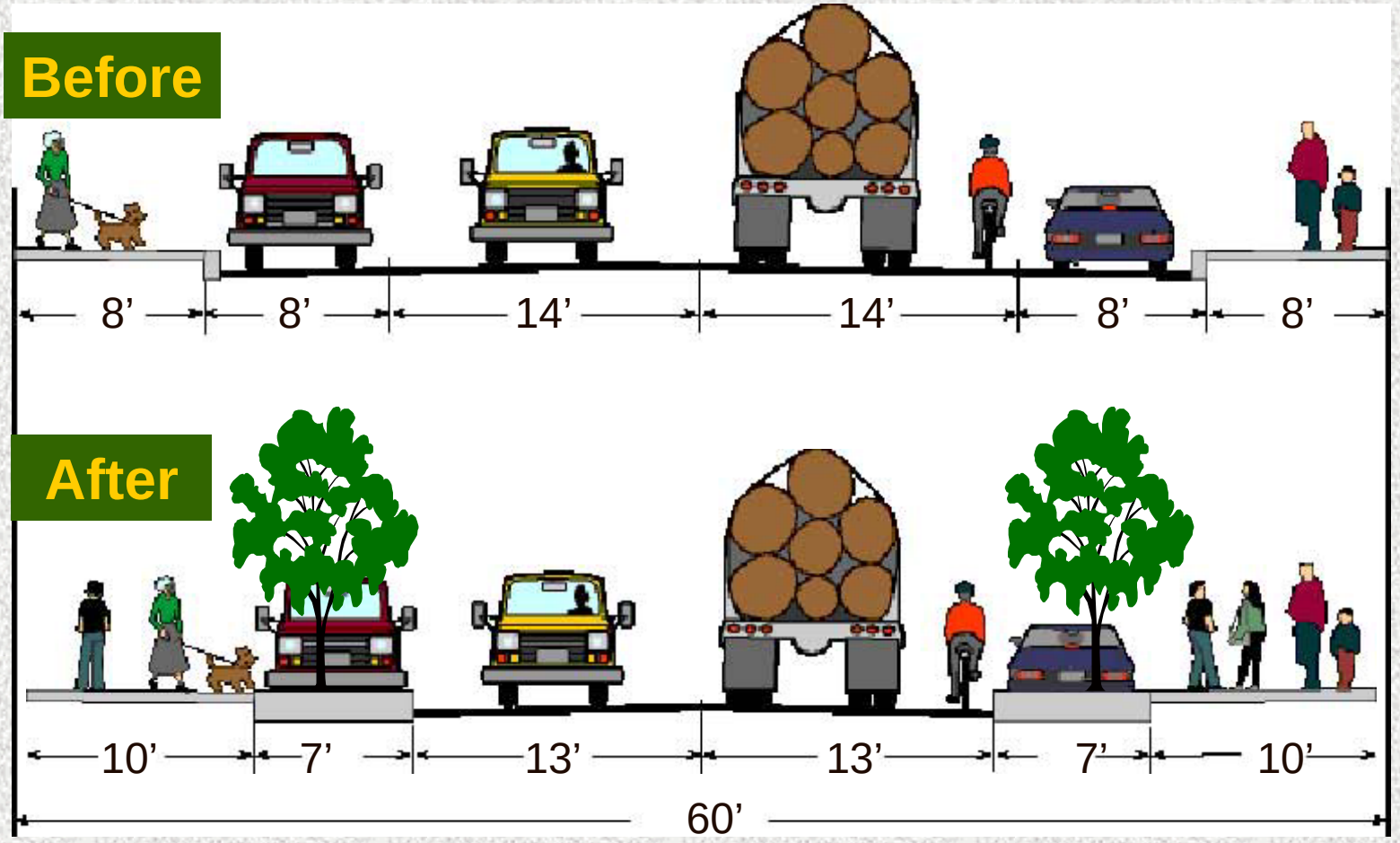
Family & Fun

Traditional Downtown

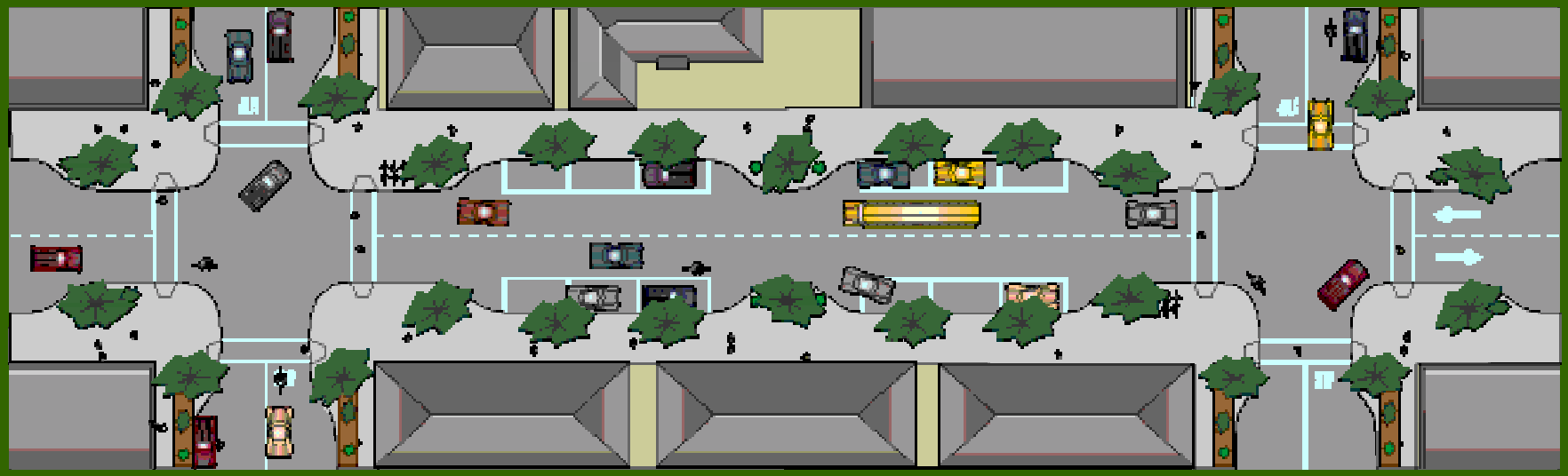
- Constrained right-of-way
- Difficult parallel parking
- Seasonal Congestion
- Noisy trucks
- Narrow sidewalks



Add Parking Bays and Curb Extensions



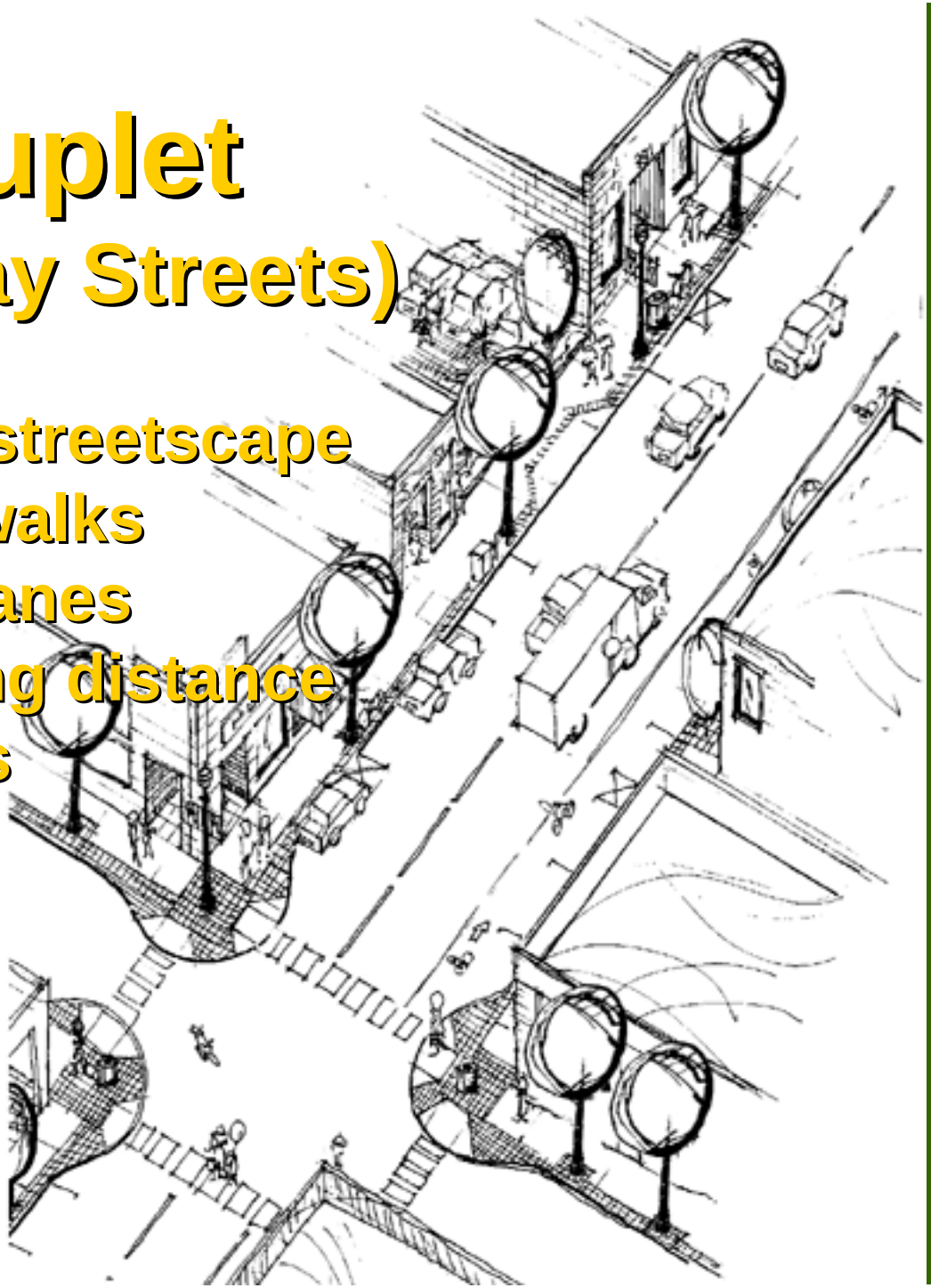
Traditional Downtown



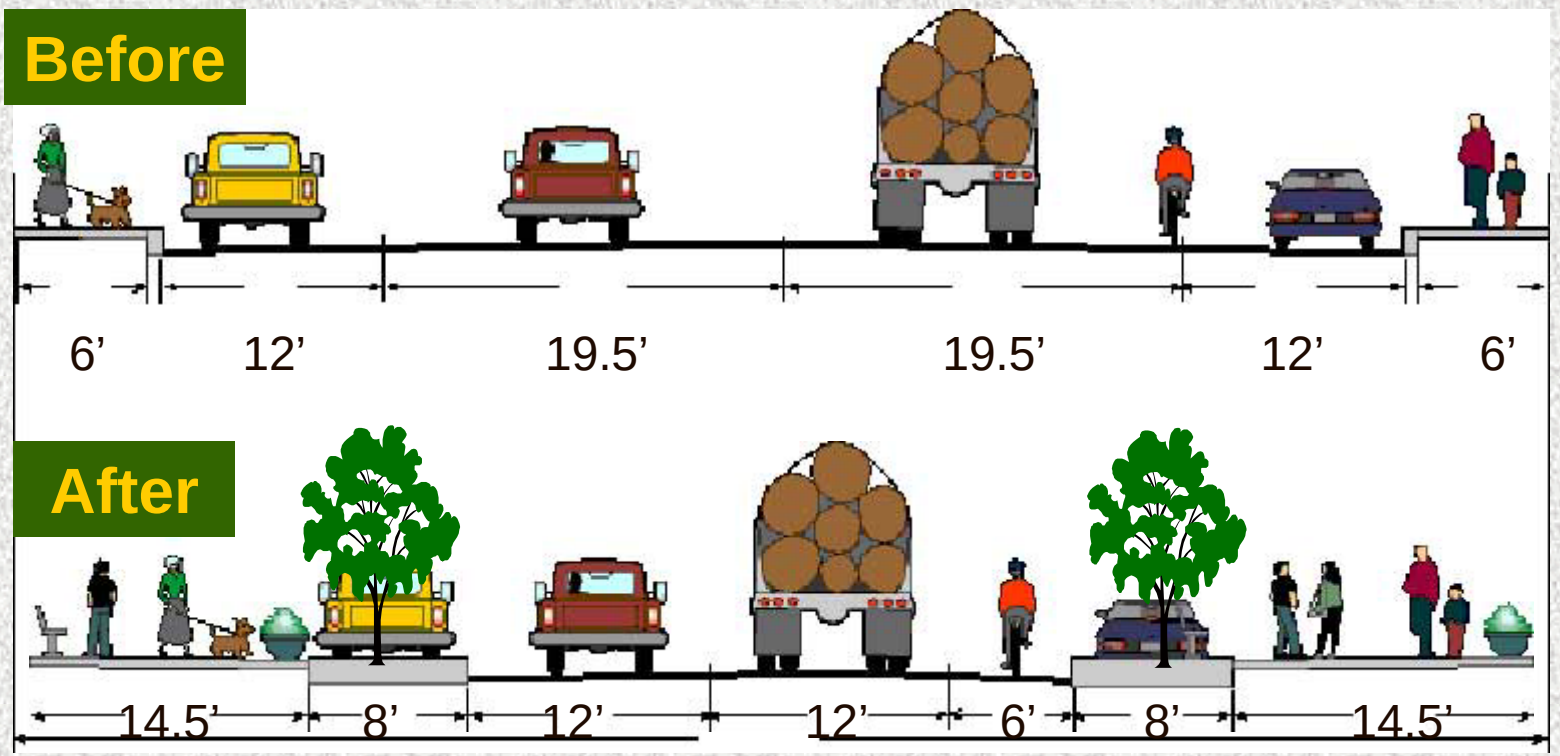
- Keep blocks short & restrict driveways.
- Add curb extensions & parking bays.
- Place buildings at front property line.
- Plant trees to soften the street.
- Encourage street-oriented activity.
- Study feasibility of truck route

Couplet
(One-Way Streets)

- Unattractive streetscape
- Narrow sidewalks
- Wide travel lanes
- Long crossing distance
- No bike lanes
- Speeding

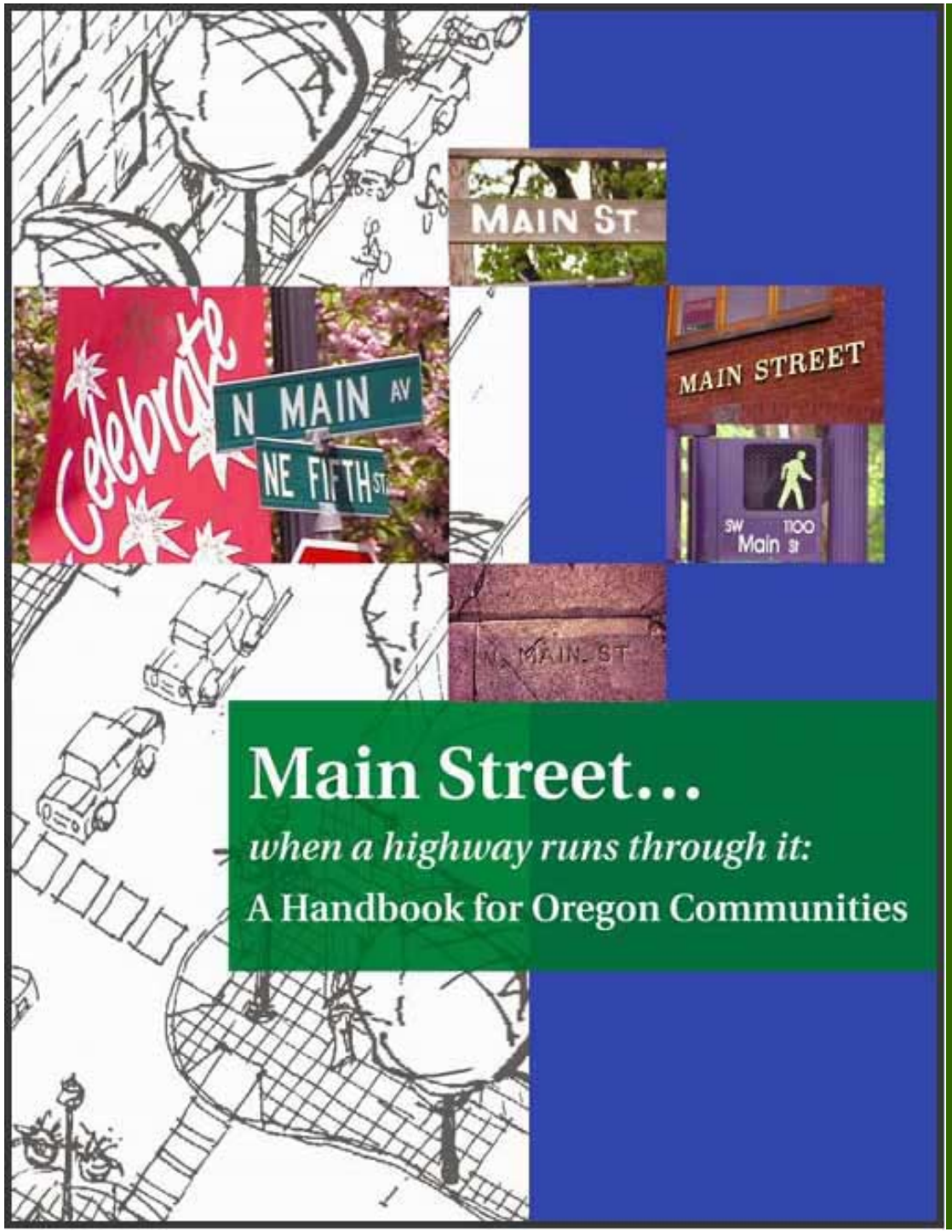


Widen Sidewalks & Add Bike Lanes



Couplet (One-Way Streets)

- Widen sidewalks.
- Add curb extensions & bike lane.
- Square corners where no right turns.
- Put buildings at sidewalk & add parks.
- Plant trees to soften the street.
- Encourage street-oriented activity.



Transportation & Growth Management Program

www.lcd.state.or.us/tgm.html

Oregon Downtown Development Association

www.odda.org

David Evans and Associates, Inc.

www.deainc.com